

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.05.2015

Version: 1

Revision: 06.05.2015

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Trade name **SIGNTREAT – High Performance Special Gas**

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Application of the substance / the preparation:

additive

Coating

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

SIGNRACER GmbH

Gartenweg 24

CH-6343 Buonas

Phone: +41-41-7920157

Mobil: +41-76-3390158

Informing department:

Product Safety Department

e-mail: ralf.timm@signracer.ch

1.4 Emergency telephone number: +41 41 7920157 (Business hours: 08.00-17.00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

F+; Extremely flammable

R12: Extremely flammable.

R18-52/53: In use, may form flammable/explosive vapour-air mixture. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02 GHS09

Signal word Danger

Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

(Contd. on page 2)

GB

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 06.05.2015

Version: 1

Revision: 06.05.2015

Trade name **SIGNTREAT – High Performance Special Gas**

(Contd. of page 1)

- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
 P261 Avoid breathing mist/vapours/spray.
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P321 Specific treatment (see on this label).
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Pressurized container.
 Protect from sunlight and do not expose to temperatures exceeding 50°C.
 Do not pierce or burn, even after use.
 Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.











SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description:

Mixture of the following components:
 Active substance with propellant.

Dangerous components:

CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5	propane  F+ R12  Flam. Gas 1, H220  Press. Gas C, H280	40-50%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0	butane  F+ R12  Flam. Gas 1, H220  Press. Gas C, H280	40-50%
CAS: 107-46-0 EINECS: 203-492-7	hexamethyldisiloxane  F R11;  N R50/53  Flam. Liq. 2, H225  Aquatic Chronic 1, H410	1-5%

Additional information For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Instantly remove any clothing soiled by the product.

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness bring patient into stable side position for transport.

After skin contact

In cases of freeze burns, rinse with plenty of water. Do not remove clothing.

Instantly wash with water and soap and rinse thoroughly.

The product is not skin irritating.

After eye contact Rinse opened eye for several minutes under running water.

After swallowing No special measures required.

(Contd. on page 3)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 06.05.2015

Version: 1

Revision: 06.05.2015

Trade name **SIGNTREAT – High Performance Special Gas**

(Contd. of page 2)

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

Information for doctor Symptomatic treatment

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents

Foam

Fire-extinguishing powder

Carbon dioxide

For safety reasons unsuitable extinguishing agents Water with a full water jet.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus.

Additional information Cool endangered containers with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

6.2 Environmental precautions:

Do not allow product to reach sewage system, surface/ground water or soil.

6.3 Methods and material for containment and cleaning up:

Allow material to evaporate.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Product is combustible.

Keep away from combustible materials, open flames and all sources of heat.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers:

Store only in the original container.

Use only containers specifically permitted for this substance/product.

Information about storage in one common storage facility: Store away from oxidising agents.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Protect from heat and direct sunlight.

Storage class 2 B

(Contd. on page 4)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 06.05.2015

Version: 1

Revision: 06.05.2015

Trade name SIGNTREAT – High Performance Special Gas

(Contd. of page 3)

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical systems: No further data; see chapter 7.

8.1 Control parameters

Components with critical values that require monitoring at the workplace:

Additional information: The lists that were valid during the compilation were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Do not inhale gases / fumes / aerosols.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Protection of hands:

Protective gloves (EN 374)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

cold-resistant protective gloves (EN 511)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed safety glasses (EN 166)

Body protection: Protective work clothing: DIN EN 13034

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form: Condensed gas

Colour: Colourless

Smell: Product specific

pH-value: Not determined

Change in condition

Melting point/Melting range: ~ -130 °C

Boiling point/Boiling range: Not determined

Flash point: < -60 °C

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.05.2015

Version: 1

Revision: 06.05.2015

Trade name SIGNTREAT – High Performance Special Gas

(Contd. of page 4)

Self-inflammability:	Product is not selfigniting.
Danger of explosion:	Product is not explosive.
Critical values for explosion:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not determined.
Density	Not determined
Solubility in / Miscibility with Water:	Not determined.
Partition coefficient (n-octanol/water):	Not determined.
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

Reacts with strong oxidizing agents

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised

10.4 Conditions to avoid Heat, flames, sparks and other sources of ignition

10.5 Incompatible materials: strong oxidizing agent.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD/LC50 values that are relevant for classification:

106-97-8 butane

Inhalative	LC50/4h	658 mg/L (rat)
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107-46-0 hexamethyldisiloxane

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50/4h	106000 mg/m ³ (rat)

Primary irritant effect:

Skin corrosion/irritation No irritant effect.

Serious eye damage/irritation No irritant effect.

Respiratory or skin sensitisation No sensitizing effect known.

Other information (about experimental toxicology):

107-46-0 hexamethyldisiloxane

NOEC	0.01 (70h) mg/L (pseudokirchneriella subcapitata) (OECD 201)
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Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.05.2015

Version: 1

Revision: 06.05.2015

Trade name SIGNTREAT – High Performance Special Gas

Extremely flammable

(Contd. of page 5)

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

107-46-0 hexamethyldisiloxane

EC50 0.22 (96h) mg/L (pseudokirchneriella subcapitata) (OECD 201)

LC50 0.46 (96h) mg/L (oncorhynchus mykiss)

12.2 Persistence and degradability

Not easily biodegradable

The product is highly volatile and can be largely eliminated from the water by stripping.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Toxic for fish

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Waste material must be disposed of in accordance with Directive on waste 2008/98/EC as well as national and local regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number

ADR, IMDG, IATA

UN1950

14.2 UN proper shipping name

ADR

1950 AEROSOLS, ENVIRONMENTALLY
HAZARDOUS

IMDG

AEROSOLS

IATA

AEROSOLS, flammable

(Contd. on page 7)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 06.05.2015

Version: 1

Revision: 06.05.2015

Trade name SIGNTREAT – High Performance Special Gas

(Contd. of page 6)

**14.3 Transport hazard class(es)
ADR**



Class 2 5F Gases.
Label 2.1

IMDG, IATA



Class 2.1
Label 2.1

**14.4 Packing group
ADR, IMDG, IATA**

Void

14.5 Environmental hazards:

Marine pollutant: No
Special marking (ADR): Symbol (fish and tree)

14.6 Special precautions for user

Warning: Gases.
Kemler Number: -
EMS Number: F-D,S-U

**14.7 Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code**

Not applicable.

Transport/Additional information:

ADR

Limited quantities (LQ) 1L
Excepted quantities (EQ) Code: E0
Not permitted as Excepted Quantity

Transport category 2
Tunnel restriction code D

IMDG

Limited quantities (LQ) 120 ml
Excepted quantities (EQ) Code: E0
Not permitted as Excepted Quantity

UN "Model Regulation":

UN1950, AEROSOLS, ENVIRONMENTALLY
HAZARDOUS, 2.1

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Information about limitation of use:

Employment restrictions concerning young persons must be observed (94/33/EC).

Employment restrictions concerning pregnant and lactating women must be observed (92/85/EC).

(Contd. on page 8)

GB

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 06.05.2015

Version: 1

Revision: 06.05.2015

Trade name SIGNTREAT – High Performance Special Gas

(Contd. of page 7)

Technical instructions (air):

Class	Share in %
NK	>90

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H410 Very toxic to aquatic life with long lasting effects.
- R11 Highly flammable.
- R12 Extremely flammable.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Department issuing data specification sheet: Product safety department

Abbreviations and acronyms:

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
- ICAO: International Civil Aviation Organisation
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Flam. Gas 1: Flammable gases, Hazard Category 1
- Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
- Press. Gas C: Gases under pressure: Compressed gas
- Flam. Liq. 2: Flammable liquids, Hazard Category 2
- Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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